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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,061	07/18/2003	Stephan Gehring	30287-93	3982
44279	7590	09/11/2008	EXAMINER	
PULSE-LINK, INC. 1969 KELLOGG AVENUE CARLSBAD, CA 92008			LIU, BEN H	
			ART UNIT	PAPER NUMBER
			2616	
			MAIL DATE	DELIVERY MODE
			09/11/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/623,061	GEHRING ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	BEN H. LIU	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 April 2008.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 42-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 42-60 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ .  | 6) <input type="checkbox"/> Other: _____ .                        |

**DETAILED ACTION**

*Response to Amendment*

1. This is in response to an amendment/response filed on April 25, 2008.
2. No claims have been amended.
3. Claims 17-41 have been cancelled.
4. Claims 42-60 have been added.
5. Claims 42-60 are currently pending.

*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 42-60 is rejected under 35 U.S.C. 102(b) as being anticipated by Fulthorp et al. (U.S. Patent 5,737,330).

**For independent claim 42,** Fulthorp et al. disclose an ultra-wideband communications device comprising:

a transceiver (*see figure 2 remote radio units 6 and base stations 2*), the transceiver configured to transmit and receive ultra-wideband signals according to a medium access control

protocol (*see column 2 lines 24-33, which recite remote radio units 6 and base stations 2 that both have transmit and receive capabilities*),

the protocol having a first time period and a second time period (*see column 2 lines 27-29, which recite radio units 6 and base stations 2 that operate in a first and second mode*), the first time period employing a random access protocol (*see column 2 lines 44-52, which recite a first mode that uses a carrier sense multiple access (CSMA) mode*) and the second time period employing a Time Division Multiple Access protocol (*see column 8 lines 47-62, which recite a second mode that uses TDMA*).

**For independent claim 53,** Fulthorp et al. disclose an ultra-wideband communications device comprising:

a transceiver (*see figure 2 remote radio units 6 and base stations 2*), the transceiver configured to transmit and receive ultra-wideband signals according to a medium access control protocol (*see column 2 lines 24-33, which recite remote radio units 6 and base stations 2 that both have transmit and receive capabilities*),

the protocol including a random access period and a Time Division Multiple Access period (*see column 5 lines 1-5, which recite operating in a first CSMA random access mode and second TDMA mode*), the transceiver further configured to transmit data in the Time Division Multiple Access period (*see column 8 lines 56-62, which recite a TDMA mode for transmission of high volume data*).

**For claim 43,** Fulthorp et al. disclose a ultra-wideband communications device wherein the random access protocol Comprises a carrier sensing protocol (*see column 2 lines 44-45, which recite a carrier sense multiple access mode*).

**For claim 44,** Fulthorp et al. disclose a ultra-wideband communications device wherein the transceiver is configured to transmit and receive at a plurality of data rates (*see column 8 lines 65-67, which recite aligning the transmit clocks to match a desired bit rate of the remote units 6*).

**For claims 45 and 55,** Fulthorp et al. disclose a ultra-wide-band communications device wherein the transceiver is configured to receive the ultra-wideband signals from a wireless medium (*see figure 2, which recites a wireless network system including remote radio units 6 and base stations 2*).

**For claims 46 and 56,** Fulthorp et al. disclose a ultra wide-band communications device wherein the transceiver is configured to transmit and receive a synchronization signal, the synchronization signal used to communicate clock synchronization with another device (*see column 3 lines 21-22, which recite transmitting a frame synchronization sequence*).

**For claims 47 and 57,** Fulthorp et al. disclose a ultra wide-band communications device wherein the transceiver further comprises a physical layer, the physical layer comprising a receive gain control circuit (*see column 4 lines 5-9, which recite a receiver that determines signal strength*).

**For claims 48 and 59,** Fulthorp et al. disclose a ultra wide-band communications device wherein the device further comprises a framing control unit, the framing control unit defining Time Division Multiple Access frames, the frames comprising a start of frame section and at least one data slot (*see column 3 lines 21-23, which recite a data frame including a beginning frame synchronization sequence followed by a data portion*).

**For claims 49 and 60,** Fulthorp et al. disclose a ultra wide-band communications device wherein the at least one data slot has a variable length (*see column 9 lines 60-66, which recite different packet types with different slot sizes*).

**For claim 50,** Fulthorp et al. disclose a ultra wide-band communications device wherein the transceiver is configured to define the start and duration of the first time period (*see column 2 lines 53-60, which recite a sequence list that indicates a communication interval for each of the remote radio units*).

**For claim 51,** Fulthorp et al. disclose a ultra wide-band communications device wherein the transceiver is configured to transmit and receive data asynchronously (*see column 2 lines 44-52, which recite remote radio units that delays transmission for a random length of time*).

**For claims 52 and 58,** Fulthorp et al. disclose a ultra wide-band communications device wherein the transceiver is configured to transmit and receive data isochronously (*see column 8 lines 56-62, which recite the TDMA mode that provides a fixed time slot for each remote unit for transmission*).

#### ***Response to Arguments***

8. Applicant's arguments with respect to claims 17-41 have been considered but since the claims have been cancelled, the arguments are moot.

#### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (*see form PTO-892*).

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/  
Supervisory Patent Examiner, Art Unit  
2616

BL